

Work Permit # DRL-2010-4

Work Order # N/A

Job # N/A

Activity # N/A

1. Work requester fills out this section.

☐ Standing Work Permit

Requester: <u>D. LYNCH</u>	Date: <u>5/7/2010</u>	Ext.: <u>2253</u>	Dept/Div/Group: <u>PHENIX / PO</u>
Other Contact person (if different from requester): <u>C. BIGGS</u>			Ext.: <u>7515</u>
Work Control Coordinator: <u>D. LYNCH</u>	Start Date: <u>5/7/2010</u>	Est. End Date: <u>5/14/2010</u>	
Brief Description of Work: <u>INSPECTION OF NEW AR DRAIN BOARD SYSTEM</u>			
Building: <u>100 8 QM PAP</u>	Room: <u>QD PAP</u>	Equipment: <u>AR DRAIN</u>	Service Provider: <u>PHENIX / REEL</u>

2. WCC, Requester/Designee, Service Provider, and ESS&H (as necessary) fill out this section or attach analysis

ESS&H ANALYSIS			
Radiation Concerns <input checked="" type="checkbox"/> None <input type="checkbox"/> Activation <input type="checkbox"/> Airborne <input type="checkbox"/> Contamination <input type="checkbox"/> Radiation <input type="checkbox"/> Other			
<input type="checkbox"/> Special nuclear materials involved, notify Isotope Special Materials Group		<input type="checkbox"/> Fissionable materials involved, notify Laboratory Criticality Officer	
Radiation Generating Devices: <input type="checkbox"/> Radiography <input type="checkbox"/> Moisture Density Gauges		<input type="checkbox"/> Soil Density Gauges <input type="checkbox"/> X-ray Equipment	
Safety and Security Concerns			
<input type="checkbox"/> None		<input type="checkbox"/> Explosives	
<input type="checkbox"/> Adding/Removing Walls or Roofs		<input type="checkbox"/> Transport of Haz/Rad Material	
<input type="checkbox"/> Critical Lift		<input type="checkbox"/> Fumes/Mist/Dust*	
<input type="checkbox"/> Asbestos*		<input type="checkbox"/> Heat/Cold Stress	
<input checked="" type="checkbox"/> Cryogenic		<input type="checkbox"/> Nanomaterials/particles*	
<input type="checkbox"/> Beryllium*		<input type="checkbox"/> Noise*	
<input type="checkbox"/> Electrical		<input type="checkbox"/> Hydraulic	
<input type="checkbox"/> Biohazard*		<input type="checkbox"/> Lasers*	
<input type="checkbox"/> Elevated Work		<input type="checkbox"/> Non-ionizing Radiation*	
<input type="checkbox"/> Chemicals/Corrosives*		<input type="checkbox"/> Excavation	
<input type="checkbox"/> Lead*		<input type="checkbox"/> Oxygen Deficiency*	
<input type="checkbox"/> Confined Space*		<input type="checkbox"/> Material Handling	
<input type="checkbox"/> Ergonomics*		<input type="checkbox"/> Penetrating Fire Walls	
		<input type="checkbox"/> Vacuum	
		<input type="checkbox"/> Other	
* Industrial Hygiene (IH) Review Required			
Environmental Concerns			
<input checked="" type="checkbox"/> None		<input type="checkbox"/> Work impacts Environmental Permit No.	
<input type="checkbox"/> Atmospheric Discharges (rad/non-rad)		<input type="checkbox"/> Land Use Institutional Controls	
<input type="checkbox"/> Chemical or Rad Material Storage or Use		<input type="checkbox"/> Soil Activation/contamination	
<input type="checkbox"/> Cesspools (UIC)		<input type="checkbox"/> Liquid Discharges	
<input type="checkbox"/> High water/power consumption		<input type="checkbox"/> Waste-Clean	
Waste disposition by:		<input type="checkbox"/> Waste-Mixed	
<input type="checkbox"/> Pollution Prevention (P2)/Waste Minimization Opportunity:		<input type="checkbox"/> Waste-Radioactive	
<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> Waste-Hazardous	
		<input type="checkbox"/> Waste-Regulated Medical	
		<input type="checkbox"/> Underground Duct/Piping	
		<input type="checkbox"/> Other	
FACILITY CONCERNS			
<input checked="" type="checkbox"/> None		<input type="checkbox"/> Potential to Cause a False Alarm	
<input type="checkbox"/> Access/Egress <input type="checkbox"/> Limitations		<input type="checkbox"/> Electrical Noise	
<input type="checkbox"/> Impacts Facility Use Agreement		<input type="checkbox"/> Temperature Change	
<input type="checkbox"/> Configuration Control		<input type="checkbox"/> Other	
<input type="checkbox"/> Maintenance Work on Ventilation Systems		<input type="checkbox"/> Utility Interruptions	
WORK CONTROLS			
Work Practices			
<input type="checkbox"/> None		<input type="checkbox"/> Exhaust Ventilation	
<input checked="" type="checkbox"/> Back-up Person/Watch		<input type="checkbox"/> Lockout/Tagout	
<input type="checkbox"/> HP Coverage		<input type="checkbox"/> Spill Containment	
<input type="checkbox"/> Barricades		<input type="checkbox"/> Posting/Warning Signs	
<input type="checkbox"/> IH Survey		<input type="checkbox"/> Time Limitation	
<input type="checkbox"/> Scaffolding-requires inspection		<input type="checkbox"/> Other	
<input type="checkbox"/> Warning Alarm (i.e. "high level")			
Personal Protective Equipment			
<input type="checkbox"/> None		<input checked="" type="checkbox"/> Gloves	
<input type="checkbox"/> Ear Plugs		<input type="checkbox"/> Lab Coat	
<input type="checkbox"/> Ear Muffs		<input checked="" type="checkbox"/> Safety Glasses	
<input type="checkbox"/> Disposable Clothing		<input type="checkbox"/> Respirator*	
<input type="checkbox"/> Face Shield		<input type="checkbox"/> Safety Harness	
<input type="checkbox"/> Hard Hat		<input checked="" type="checkbox"/> Safety Shoes	
<input type="checkbox"/> Shoe Covers		<input type="checkbox"/> Other	
Permits Required (Permits must be valid when job is scheduled.)			
<input checked="" type="checkbox"/> None		<input type="checkbox"/> Cutting/Welding	
<input type="checkbox"/> Concrete/Masonry Penetration		<input type="checkbox"/> Impair Fire Protection Systems	
<input type="checkbox"/> Digging/Core Drilling		<input type="checkbox"/> Rad Work Permit-RWP No	
<input type="checkbox"/> Confined Space Entry		<input type="checkbox"/> Other	
<input type="checkbox"/> Electrical Working Hot			
Dosimetry/Monitoring			
<input checked="" type="checkbox"/> None		<input type="checkbox"/> Heat Stress Monitor	
<input type="checkbox"/> Air Effluent		<input type="checkbox"/> Real Time Monitor	
<input type="checkbox"/> Noise Survey/Dosimeter		<input type="checkbox"/> TLD	
<input type="checkbox"/> Ground Water		<input type="checkbox"/> Self-reading Pencil Dosimeter	
<input type="checkbox"/> O ₂ /Combustible Gas		<input type="checkbox"/> Waste Characterization	
<input type="checkbox"/> Liquid Effluent		<input type="checkbox"/> Self-reading Digital Dosimeter	
<input type="checkbox"/> Passive Vapor Monitor		<input type="checkbox"/> Other	
<input type="checkbox"/> Sorbent Tube/Filter Pump			
Training Requirements (List specific training requirements)			
<u>CRD ACCESS, PHENIX WORKPRACTICES, CRYO SAFETY</u>			
Based on analysis above, the Walkdown Team determines the risk, complexity, and coordination ratings below:			
ESS&H Risk Level:		<input checked="" type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High	
Complexity Level:		<input checked="" type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High	
Work Coordination:		<input checked="" type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High	
WCC: <u>[Signature]</u>		Date: <u>5/7/2010</u>	
Service Provider: <u>[Signature]</u>		Date: <u>5/7/2010</u>	
Authorization to start: <u>[Signature]</u>		Date: <u>5/7/2010</u>	
(Departmental Sup/WCC/Designee)			

3. Both work requester and service provider contribute to work plan (use attachments for detailed plans)

Work Plan (procedures, timing, equipment, and personnel availability need to be addressed): ALL WORK IS WORKED PLANNED WORK UPON COMPLETION A HAND SKETCH OF THE PIPING LAYOUT (CONCEPT) SHALL BE ATTACHED TO PERMIT DRAWING OF CAS PIPING SYSTEM.

NOTE: THIS WP DOES NOT INCLUDE VENDOR INSTALLATION OF DRAIN & RELATED PIPING.

Special Working Conditions Required (e.g., Industrial Hygiene hold points or other monitoring) **NONE**

Notifications to operations and Operational Limits Requirements: **NONE**

Post Work Testing, Notification or Documentation Required: **NONE**

Job Safety Analysis Required: ☐ Yes ☒ No Walkdown Completed (Required): ☒ Yes

Reviewed by: Primary Reviewer signature means that the hazards and risks that could impact ESS&H have been identified, a Walkdown was completed and the hazards will be controlled according to BNL requirements.

Title	Name (print)	Signature	Life #	Date
Primary Reviewer				
ES&H Professional				
Building Manager				
Service Provider				
Work Control Coordinator				
Safety and Health Services (i.e. IH Rep)				
Other				
Review Done: <input type="checkbox"/> in series		<input type="checkbox"/> team		

4. Job site personnel fill out this section.

Note: Signature indicates personnel performing work have read and understand the hazards and permit requirements (including any attachments).

Job Supervisor:		Contractor Supervisor:	
Workers:	Life #:	Workers:	Life #:

Workers are encouraged to provide feedback on ESS&H concerns or on ideas for improved job work flow. Use feedback form or space below.

5. Department/Division Line Manager or Designee

Conditions are appropriate to start work: (Permit has been reviewed, work controls are in place and site is ready for job.)

Name:	Signature:	Life #:	Date:

6. Worker provides feedback.

Worker Feedback (use attached sheets as necessary)

a) WCM/WCC: Are there any changes as a result of worker feedback? ☐ Yes ☐ No

Note: See work planning and control subject area section 2.6.

7. Post Job Review/Closeout: Work Control Coordinator (authorizing dept.) checks quality of completed permit and ensures the work site is left in an acceptable condition. (WCC can delegate clean up of work area to work supervisor.) The WCC ensures that the change process to update drawings, placards, postings, procedures, etc. are initiated, if necessary.

Name:	Signature:	Life #:	Date:
Comments:			